

**AMENDMENTS TO THE SPECIFICATION:**

Please delete paragraph [0001] in its entirety.

Please replace paragraph [0005] with the following new paragraph:

**[0005]** General chemical compositions for groups of oxide materials with simple perovskite structures are  $(A_{1-x}M_x)BO_3$ ,  $(A_{1-x}M_x)(B'B'')O_3$  or  $A(B_{1-x}M_x)O_3$ , (where A can be  $1^+$ ,  $2^+$  and  $3^+$  ions; B can be  $5^+$ ,  $4^+$ ,  $3^+$  ions; B' and B'' can be  $2^+$ ,  $3^+$ ,  $4^+$ ,  $5^+$  and  $6^+$  ions, M is a magnetic ion dopant). Specific examples are  $(A_{1-x}M_x)TiO_3$ ,  $(A_{1-x}M_x)ZrO_3$ ,  $(A_{1-x}M_x)SnO_3$ ,  $(A_{1-x}B_x)HfO_3$ ,  $La(Mo_{1-x}M_x)O_3$ ,  $Sr(Ti_{1-x}M_x)O_3$  where A=Ca, Sr, Ba, Pb, Cd and M= Fe, Ni, Co, Mn with  $0 < x < 0.15$ .

Please replace paragraph [0007] with the following new paragraph:

**[0007]** Figure 2 illustrates plots of magnetization ( $\mu_B/Fe$ ) measured as a function of magnetic field at a temperature of 300K by SQUID magnetometer for a series of  $(Ba_{1-x}Fe_x)TiO_3$  with  $x = 0.01, 0.02, 0.03, 0.05, 0.07$ , and  $0.1$ .

Please replace paragraph [0008] with the following new paragraph:

**[0008]** Figure 3 illustrates plots of magnetization ( $\mu_B/mol$ ) measured as a function of magnetic field at a temperature of 300K by SQUID magnetometer for a series of  $(Ba_{0.95}M_{0.05})TiO_3$  with M=Fe, Co, and Ni.

Please replace paragraph [0009] with the following new paragraph:

**[0009]** Figure 4 illustrates plots of magnetization ( $\mu_B/mol$ ) measured as a function of magnetic field at a temperature of 300K by SQUID magnetometer for a series of  $(Ca_{0.95}M_{0.05})TiO_3$  with M=Fe, Co, and Ni.

Please replace paragraph [0010] with the following new paragraph:

**[0010]** Figure 5 illustrates plots of magnetization ( $\mu_B/\text{mol}$ ) measured as a function of magnetic field at a temperature of 300K by SQUID magnetometer for a series of  $(\text{Ba}_{0.95}\text{Fe}_{0.05})\text{BO}_3$  with  $B=\text{Ti}$ ,  $\text{Zr}$ , and  $\text{Hf}$ .

Please replace paragraph [0011] with the following new paragraph:

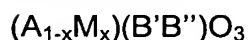
**[0011]** Figure 6 illustrates plots of magnetization ( $\mu_B/\text{mol}$ ) measured as a function of magnetic field at a temperature of 300K by SQUID magnetometer for a series of  $(\text{Ca}_{0.95}\text{Fe}_{0.05})\text{BO}_3$  with  $B=\text{Ti}$ ,  $\text{Zr}$ , and  $\text{Hf}$ .

Please replace paragraph [0013] with the following new paragraph:

**[0013]** Figures 8A and 8B depict hysteresis loops of  $(\text{Ba}_{0.94}\text{Fe}_{0.05})\text{TiO}_3$  and  $(\text{Ca}_{0.94}\text{Fe}_{0.05})\text{TiO}_3$  measured at 5K and 300K by a SQUID magnetometer.

Please replace paragraph [0016] with the following new paragraph:

**[0016]** The invention includes general chemical compositions of the forms



where A can be  $1^+$ ,  $2^+$  and  $3^+$  ions; B can be  $5^+$ ,  $4^+$ ,  $3^+$  ions; B' and B'' can be  $2^+$ ,  $3^+$ ,  $4^+$ ,  $5^+$  and  $6^+$  ions, M is a magnetic ion dopant such as Fe, Co, Ni and Mn.

Please replace Table 1 with the following new Table 1

**Table 1**

**Magnetic Properties of  $(\text{Ba}_{0.95}\text{Fe}_{0.05})\text{MO}_3$  and  $(\text{Ca}_{0.95}\text{Fe}_{0.05})\text{MO}_3$  (M=Ti, Zr, Hf)**

|  | Hc(300K)<br>(Oe) | Mr(300K) $\times 10^{-4}$<br>$\mu\text{B}/\text{Mol}$ | Hc(5K)<br>(Oe) | Mr(5K) $\times 10^{-4}$<br>$\mu\text{B}/\text{Mol}$ |
|--|------------------|---|----------------|---|
| $(\text{Ba}_{0.95}\text{Fe}_{0.05})\text{TiO}_3$ | 16               | 3.84  | 26             | 7.55  |
| $(\text{Ca}_{0.95}\text{Fe}_{0.05})\text{TiO}_3$ | 12               | 2.7   | 26             | 5.96  |
| $(\text{Ba}_{0.95}\text{Fe}_{0.05})\text{ZrO}_3$ | 25               | 4.6   | 51             | 9.6   |
| $(\text{Ca}_{0.95}\text{Fe}_{0.05})\text{ZrO}_3$ | 4.5              | 2.3   | 103            | 3.4   |
| $(\text{Ba}_{0.95}\text{Fe}_{0.05})\text{HfO}_3$ | 20               | 4.5   | 51             | 11  |
| $(\text{Ca}_{0.95}\text{Fe}_{0.05})\text{HfO}_3$ | 7                | 2.3   | 68             | 16  |